SERVICE MANUAL

Stereo Turntable

FISHER

MT-M24 EUROPE

134 082 44

This service manual is prepared for Model MT-M24. As only the components in the chart below differ, refer to the service manual MT-M22 (WM-14441) for other components.
Mark represents a non-interchangeable part.

Ref. No.	MT-M22	MT-M24	Description	Q'ty	Remark
	PACKAGE				
	141-6-1139-95016	141-6-1139-95019	Box Corrugate-exp	1	#
	ACCESSORIES				
	142-6-4119-32412	142-6-4119-32817	Explanatory Booklet	1	#
	CABINET				
	131-2-1310-30750	131-2-1310-30757	Name Plate	1	#
	141-6-4729-37623	141-6-4729-37691	Caution Label	1	#
CA1	141-0-1249-30509	141-0-1249-30514	Lid Assy	1	#
CA8	141-2-1439-14902	141-2-1439-14908	Panel Control	1	#

Add this sheet to Model MT-M22 (WM-14441) Service Manual.

WM-16230

October/'85/2,000 **Printed in Japan**

SERVICE MANUAL

FISHER

MT-M22

Stereo Turntable
(EUROPE)

134 082 40
(Silver)
134 082 41
(Red)
134 082 42
(Black)

WM-14441

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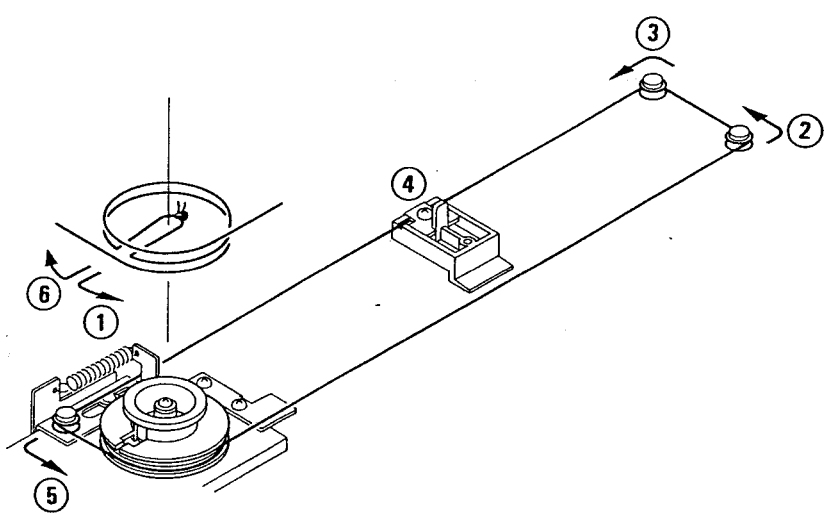
ARM FEED CORD STRINGING



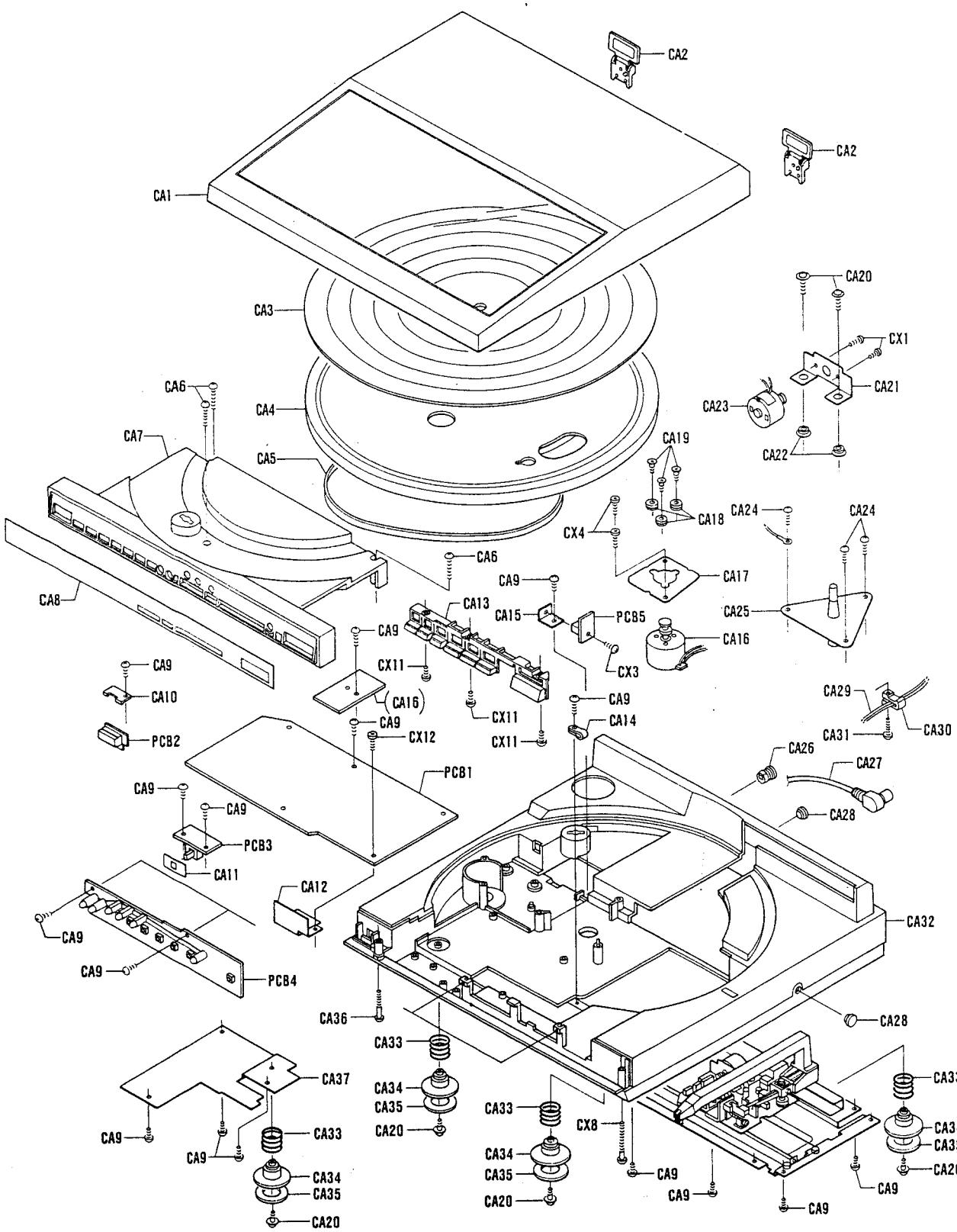
SPECIFICATIONS

TURNTABLE	MT-M22
Motor	DC Servo
Drive System	Belt
Wow and Flutter (WRMS)	0.08 %
Rumble (DIN B)	−65 dB
Speed Variation	±1.5 %
Tracking Force	2 g
Platter Diameter	300 mm
Platter Weight	0.4 kg
Record Speed Selector	33-1/3 rpm/ 45 rpm
Operation	Full Auto Linear Tracking
GENERAL Dimensions (W x H x D)	335 x 93 x 335 mm
Weight (approx.)	3 kg

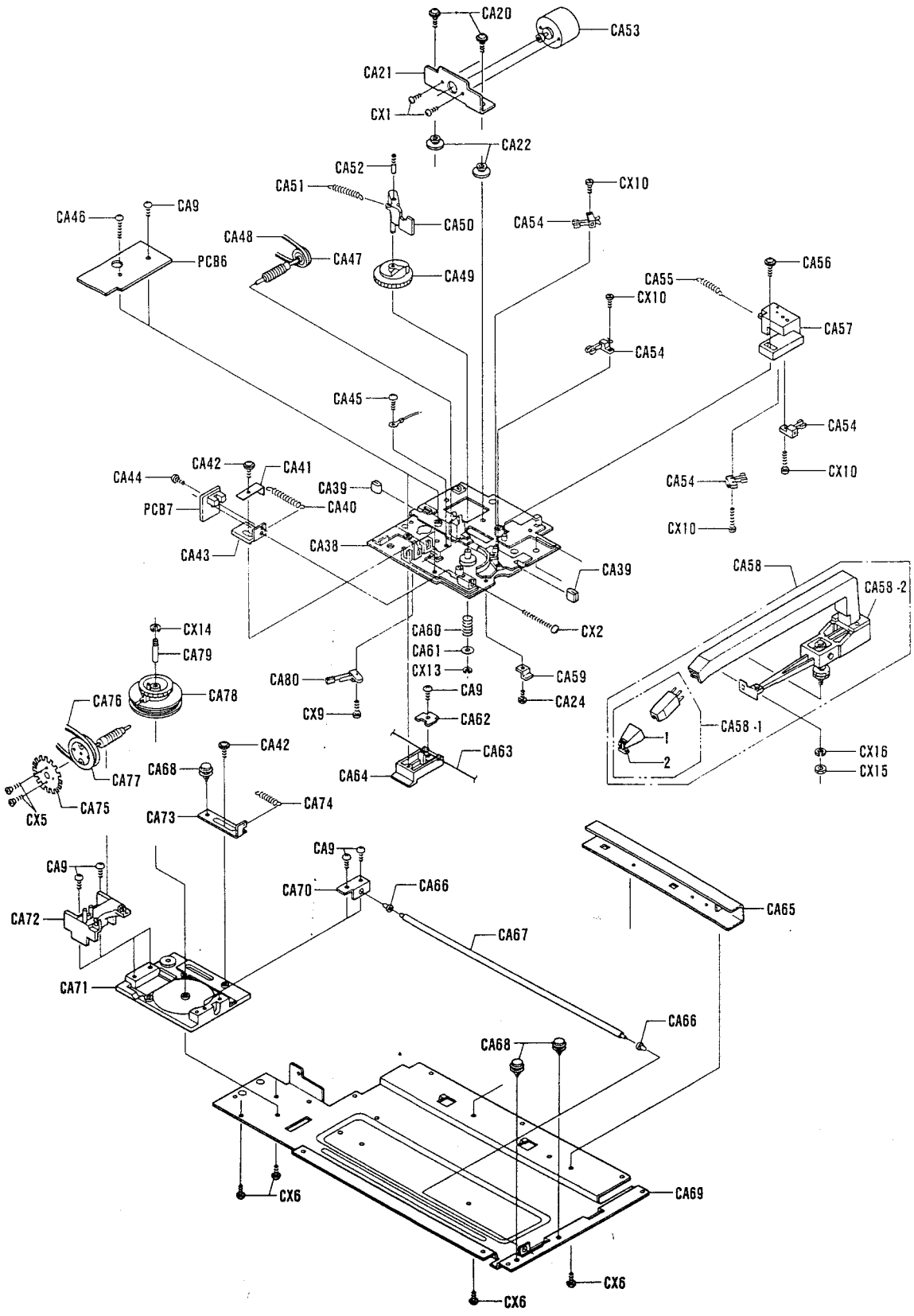
Because its products are subject to continuous improvement, Fisher Corporation reserves the right to modify product designs and specifications without notice and without incurring any obligation.

MT-M22

CABINET & CHASSIS EXPLODED VIEW



CABINET & CHASSIS EXPLODED VIEW (Continued)



CABINET & CHASSIS PARTS LIST

Ref. No.	Part No.	Description	Q'ty
	PACKAGE		
	131-6-2119-02081	Bag Polyethylene-exp	1
	131-6-3069-17050	Patching Sheet	1
	131-6-9439-00400	Ribbon	2
	141-2-4219-32700	Screw Transit	1
	141-6-2519-20990	Bag Polyethylene-exp	1
	141-6-3119-23100	Pad Front	1
	141-6-3119-23200	Pad Rear	1
	141-6-3119-23401	Pad	1
	141-6-3119-23500	Pad	1
	141-6-3119-25600	Pad	1
	141-6-3319-13200	Spacer	3
	141-6-1139-95014	Box Corrugate-exp (Silver)	1
	141-6-1139-95015	Box Corrugate-exp (Red)	1
	141-6-1139-95016	Box Corrugate-exp (Black)	1
	141-6-4559-03300	Serial No. Sheet	2
	ACCESSORIES		
	131-6-2719-10401	Bag Fan	1
	131-6-4519-15700	Guarantee Cert	1
	131-6-4559-10900	Manufacturing No.	1
	134-2-2901-11601	Adapter EP	1
	142-6-4119-32412	Explanatory Booklet	1
	CABINET		
	4-2359-76479	Connector 5P Assy [CN2]	1
	4-2359-76794	Connector 3P Assy [CN4]	1
	4-2359-77145	Connector 1P Assy (TML P.C.B)	1
	4-2359-78077	Connector 1P Assy (CONT P.C.B.)	1
	4-2359-78400	Connector 4P Assy [CN3]	1
	131-2-1310-30750	Name Plate	1
	131-2-3608-14100	Cramp Wire	3
	141-2-1449-62900	Label	1
	134-6-4739-13403	Stylus Label	1
	141-6-4559-03300	Serial No. Sheet	1
	141-6-4729-37623	Caution Label	1
CA1	141-0-1249-30505	Lid Assy (Silver)	1
CA1	141-0-1249-30506	Lid Assy (Red)	1
CA1	141-0-1249-30509	Lid Assy (Black)	1
CA2	131-0-2002-16801	Hinge Assy	2
CA3	134-2-6102-15702	Mat Turntable	1
CA4	141-2-5229-00200	Turntable	1
CA5	134-2-6302-11501	Belt	1
CA6	131-2-4201-19507	Screw, Button Hd. Tapping-3	3
CA7	141-2-1219-31300	Panel Front (Silver)	1
CA7	141-2-1219-31301	Panel Front (Red)	1
CA7	141-2-1219-31303	Panel Front (Black)	1
CA8	141-2-1439-14903	Panel Control (Silver)	1
CA8	141-2-1439-14906	Panel Control (Red)	1
CA8	141-2-1439-14902	Panel Control (Black)	1
CA9	131-2-4201-19501	Screw, Button Hd. Tapping-3	26
CA10	141-2-3519-72800	Angle Mount	1
CA11	141-2-4419-21100	Cloth	1
CA12	141-2-3229-52600	Cover Shield	1
CA13	141-2-1659-40700	Knob	1
CA14	131-2-3608-12405	Cramp Wire	1
CA15	141-2-3519-73400	Angle Mount	1
CA16	134-0-5011-03502	Motor Assy [M1]	1
CA17	141-2-3169-23300	Metal Mount Motor	1
CA18	134-2-5202-11800	Rubber Cushion	3
CA19	134-2-4201-13600	Screw	3
CA20	134-2-4201-13400	Screw	8

Ref. No.	Part No.	Description	Q'ty
CA21	141-2-3519-67100	Angle Mount(Motor)	2
CA22	141-2-4459-31800	Cushion	4
CA23	4-5272-00181	Comutate Motor Magnet (Arm) [M3]	1
CA24	131-2-4201-19502	Screw, Button Hd. Tapping-3	4
CA25	141-0-7519-03900	Shaft Turntable Complet	1
CA26	131-2-6111-14700	Bushing	1
CA27	4-2369-74240	Plug Cord Din8p L	1
CA28	131-2-2904-11001	Pad Lid (Silver)	2
CA28	131-2-2904-11000	Pad Lid (Red/Black)	2
CA29	4-2369-74062	Plug Cord	1
CA30	131-2-3608-11000	Cramp Wire	1
CA31	131-2-4201-25203	Screw, Brazier Hd. Tapping, +M3.0x16	1
CA32	141-2-1119-99700	Cabinet (Silver)	1
CA32	141-2-1119-99701	Cabinet (Red)	1
CA32	141-2-1119-99704	Cabinet (Black)	1
CA33	141-2-8559-06500	Spring Mounting	4
CA34	141-2-4459-31700	Cushion(Leg)	4
CA35	131-2-5203-23603	Felt	4
CA36	141-2-4219-09601	Screw	1
CA37	141-2-1149-35000	Cover	1
CA38	141-0-3129-01900	Unit Plate Assy	1
CA39	141-2-4459-33800	Cushion	2
CA40	141-2-8519-31900	Spring Slide Base	1
CA41	141-2-8539-53800	Spring Plate	1
CA42	131-2-4201-21100	Screw	2
CA43	141-2-3519-67400	Angle Mount(Photo C)	1
CA44	131-2-4201-20800	Screw, M2.6x6	1
CA45	131-2-4201-19500	Screw, Button Hd. Tapping-3	1
CA46	131-2-4201-19504	Screw, Button Hd. Tapping-3	1
CA47	141-0-5519-10300	Worm Assy	1
CA48	141-2-5649-25900	Belt	1
CA49	141-2-5519-52100	Worm Wheel(A)	1
CA50	141-2-7519-64000	Spindle Lifting	1
CA51	141-2-8519-60000	Spring Plate	1
CA52	134-2-4201-12800	Screw	1
CA53	4-5272-00180	Comutate Motor Magnet (Lifter) [M2]	1
CA54	4-2319-76680	Leaf Switch (Lift Down) [SW9]	1
CA54	4-2319-76680	Leaf Switch (Lift Up) [SW10]	1
CA54	4-2319-76680	Leaf Switch (T58) [SW12]	1
CA54	4-2319-76680	Leaf Switch (Right End) [SW13]	1
CA55	134-2-5101-32400	Spring	1
CA56	141-2-4219-06300	Screw	1
CA57	141-2-3519-73000	Holder	1
CA58	141-0-6419-00503	Pick-up Assy (Silver)	1
CA58-1	4-1579-27031	Cartridge(MG-37L)	1
1	4-1579-29451	Stylus(ST-37LD)	1
2	134-2-1402-12700	Retainer Needle	1
CA58-2	141-0-6419-00803	Tone Arm Assy	1
CA58	141-0-6419-00502	Pick-up Assy (Red/Black)	1
CA58-1	4-1579-27031	Cartridge(MG-37L)	1
1	4-1579-29451	Stylus(ST-37LD)	1
2	134-2-1402-12700	Retainer Needle	1
CA58-2	141-0-6419-00803	Tone Arm Assy	1
CA59	134-2-4108-27801	Plate	1
CA60	134-2-5101-26500	Spring	1
CA61	141-2-4579-05000	Washer, M3.2x10x0.2	1
CA62	141-2-3519-70300	Angle Mount	1
CA63	131-2-4112-10200	Rope	
CA64	141-2-7319-58000	Holder Slide	1
CA65	141-2-3169-25400	Guide Angle	1
CA66	141-2-4459-33200	Cushion	2
CA67	141-2-5289-01300	Rail	1
CA68	131-0-3020-11800	Pulley Assy	3
CA69	141-2-1259-06201	Plate Bottom	1

CABINET & CHASSIS PARTS LIST (Continued)

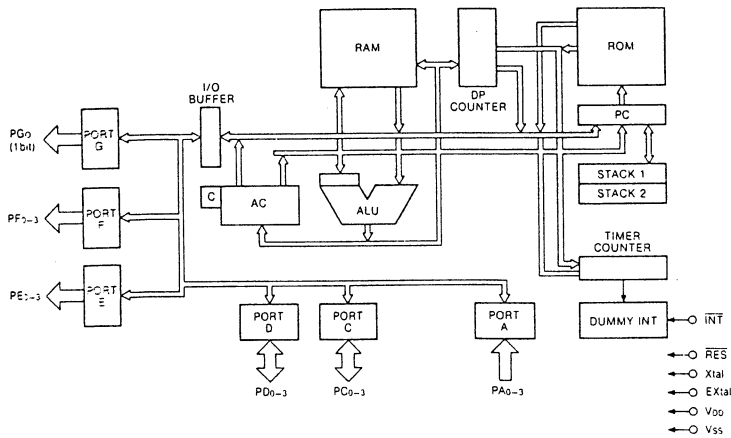
Ref. No.	Part No.	Description	Q'ty
CA70	141-2-3519-69100	Angle Mount(Rail)	1
CA71	141-2-3169-23200	Frame	1
CA72	141-2-5739-07300	Support Shaft	1
CA73	141-2-3519-69000	Angle Mount	1
CA74	141-2-8519-35300	Spring Base Slide	1
CA75	141-2-3519-73300	Plate	1
CA76	141-2-5649-25800	Belt	1
CA77	141-0-5519-10301	Worm Assy	1
CA78	141-2-5519-60100	Worm Wheel(C)	1
CA79	141-2-5529-18900	Shaft	1
CA80	4-2319-77560	Leaf Switch (Left End) [SW11]	1
CX1	101-3-1302-00311	Screw, Pan Hd., +M2.0x3	4
CX2	101-3-1303-03011	Screw, Pan Hd., +M3.0x30	1
CX3	101-3-1702-60411	Screw, Bind Hd., +M2.6x4	1
CX4	102-3-1703-00811	Screw, Bind Hd. Tapping-1, +M3.0x8	2
CX5	103-3-1202-00518	Screw, Flat Hd. Tapping-2, +M2.0x5	2
CX6	103-3-1303-00511	Screw, Pan Hd. Tapping-2, +M3.0x5	2
CX7	131-3-1302-31011	Screw, Pan Hd. C SW, +M2.3x10	1
CX8	143-3-1303-02511	Screw, Pan Hd. Tapping-B, +M3.0x25	1
CX9	143-3-1702-00618	Screw, Bind Hd. Tapping-B, +M2.0x6	1
CX10	143-3-1702-00818	Screw, Bind Hd. Tapping-B, +M2.0x8	4
CX11	143-3-1902-60611	Screw, Brazier Hd. Tapping-B, +M2.6x6	3
CX12	143-3-1903-00811	Screw, Brazier Hd. Tapping-B, +M3.0x8	1
CX13	112-3-1302-00011	E Ring, M2.0	1
CX14	112-3-1303-00011	E Ring, M3.0	1
CX15	106-3-1204-00311	Hex. Nut-2, M4.0	1
CX16	110-3-2104-00011	Spring Washer-2, M4.0	1
PCB1	141-0-1939-10031	Control P.C.B. Assy	1
PCB2	141-0-1939-10040	Power Indicator P.C.B. Assy	1
PCB3	141-0-1939-10050	Speed P.C.B. Assy	1
PCB4	141-0-1939-10060	Switch P.C.B. Assy	1
PCB5	141-0-1939-10070	PIR P.C.B. Assy	1
PCB6	141-0-1939-10080	Terminal P.C.B. Assy	1
PCB7	141-0-1939-10090	PCR P.C.B. Assy	1

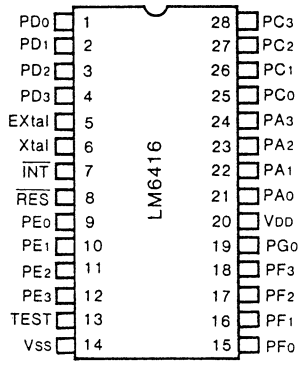
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

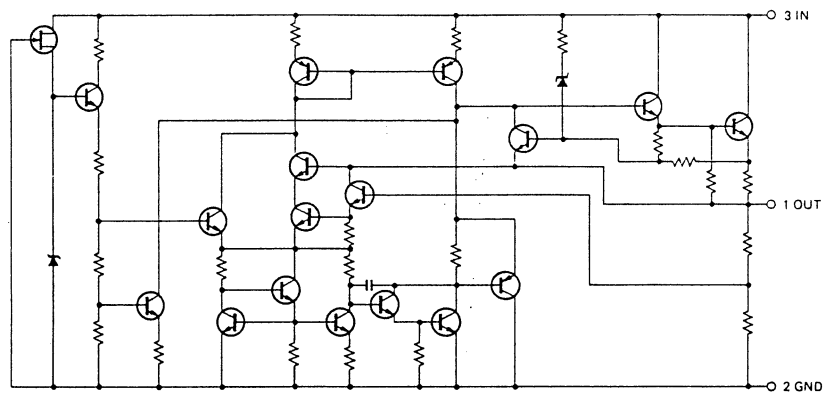
IC SIGNAL FLOW & EQUIVALENT CIRCUIT

CONTROL IC LM 6416 E

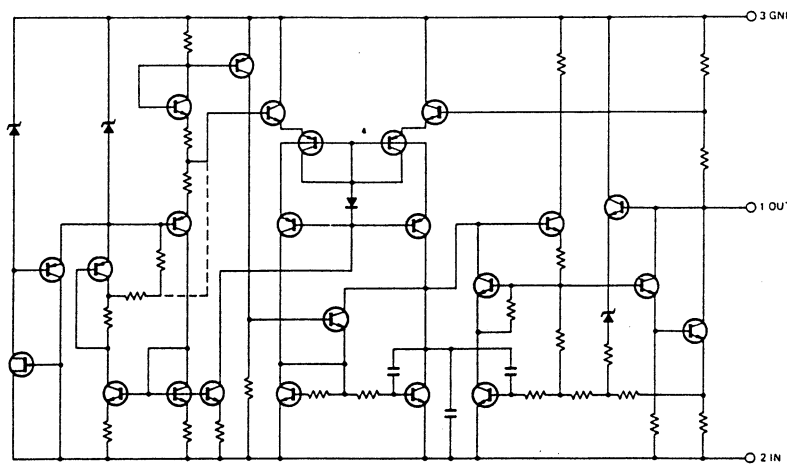




VOLTAGE REGULATOR IC NJM 7812



VOLTAGE REGULATOR IC NJM 7912



TURNTABLE ADJUSTMENTS

Stylus Pressure Adjustment

1. Place the unit on a horizontal plane and remove the lid.
2. Turn on the Power switch of the unit.
3. Press ◄ button on the control panel to shift the tonearm to the place as indicated in Fig. 1.
4. Turn the stylus pressure adjustment screw as shown in Fig. 2 through the stylus pressure adjustment hole, so that the stylus pressure meter indicates 1.8 ~ 2.2 g.

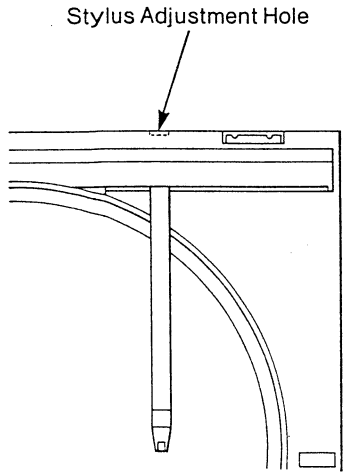


Fig. 1

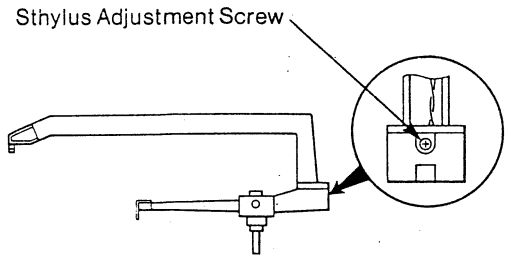


Fig. 2

Tonearm Position Adjustment

1. Turn on the power switch of the unit.
2. Remove the lid and the turntable.
3. Press ◄ button on the control panel to shift the arm to the place where the tonearm position adjustment cam can be observed. (Fig. 3)
4. Adjust the cam, so that the tonearm becomes perpendicular to the rear wall of the cabinet. (Fig. 3)

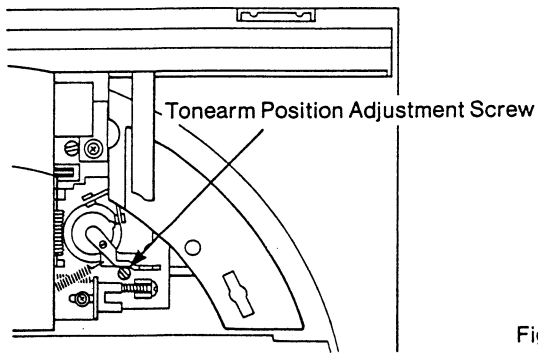


Fig. 3

Stylus Height Adjustment

1. Turn on the power switch of the unit.
2. Remove the lid and the turntable.
3. Press ◄ button on the control panel to shift the arm to the place where the stylus height adjustment screw can be observed. (Fig. 4)
4. Adjust the stylus height to 6mm±0.5mm above the turntable.

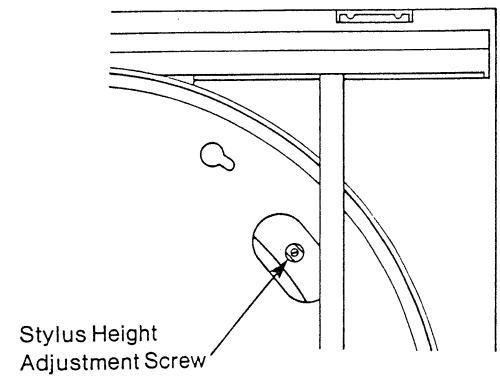


Fig.4

Rotation Adjustment

1. Turn on the power switch of the unit.
2. Use the stroboscope sheet and adjust each volume to obtain proper rotations per minute. (Fig. 5)
   Note: In the first instance, perform the adjustment for 45 r.p.m.

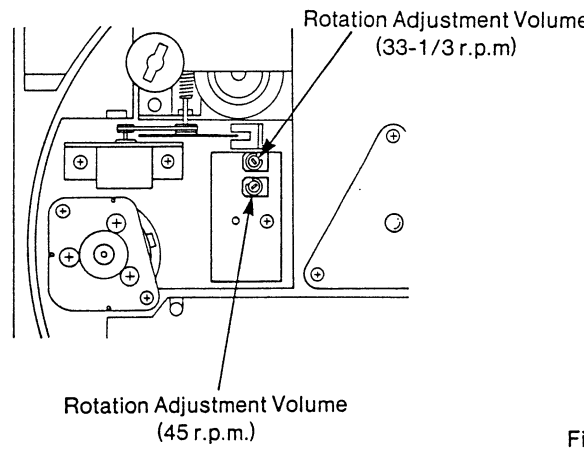


Fig. 5

TURNTABLE ADJUSTMENTS (Continued)

Photointerrupter Position Adjustment for Arm Feed

1. Turn on the power switch of the unit.
2. Place a record with less eccentricity on the turntable and play it.
3. After the record has rotated three or four times, raise the arm by pressing the CUEING button.
4. Turn the arm feed adjustment screw with a screwdriver through the hole on the right side of the cabinet, so that the arm rises straight up. (Fig. 6)

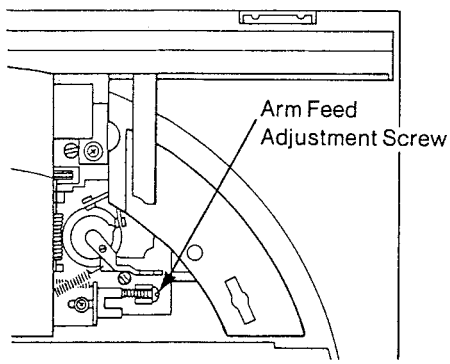


Fig. 6

Lead-in Position Adjustment

1. Turn on the power switch of the unit.
2. Place a record on the turntable and perform the lead-in operation.
3. Adjust the lead-in position adjustment cam, so that the record is led into the correct position.
   Note: If the cam is turned clockwise, the tonearm moves inward. It moves outward if the cam is turned counter-clockwise. (Fig. 7)

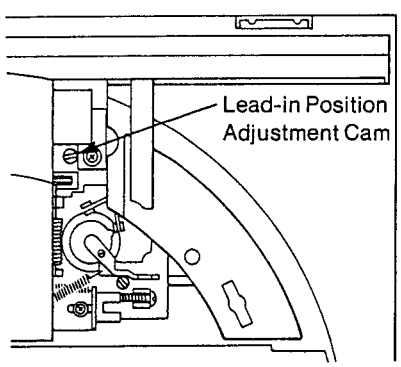
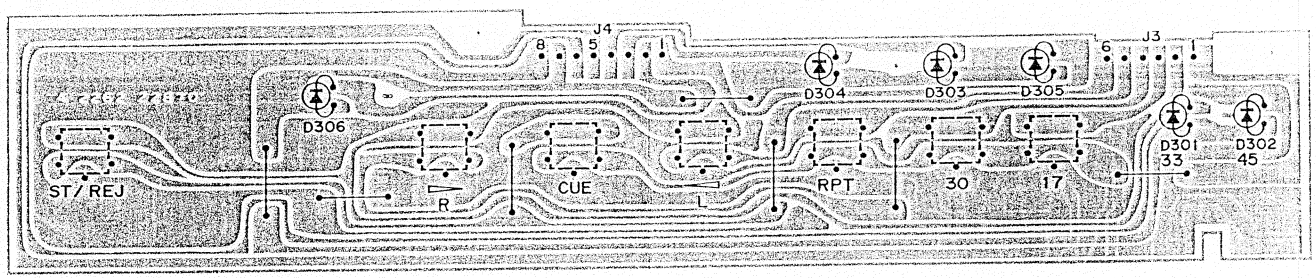


Fig. 7

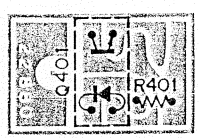
SWITCH P.C.BOARD

(BOTTOM VIEW)



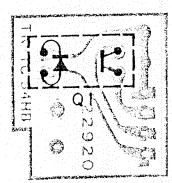
PIR P.C.BOARD

(BOTTOM VIEW)



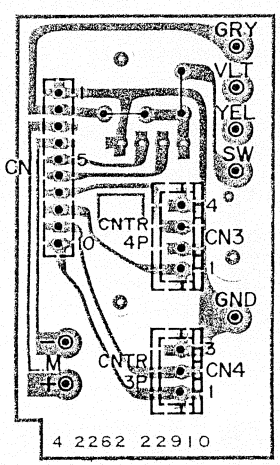
PCR P.C.BOARD

(BOTTOM VIEW)



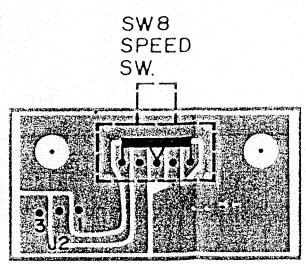
TERMINAL P.C.BOARD

(BOTTOM VIEW)



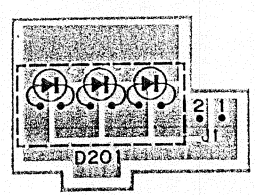
SPEED P.C.BOARD

(BOTTOM VIEW)



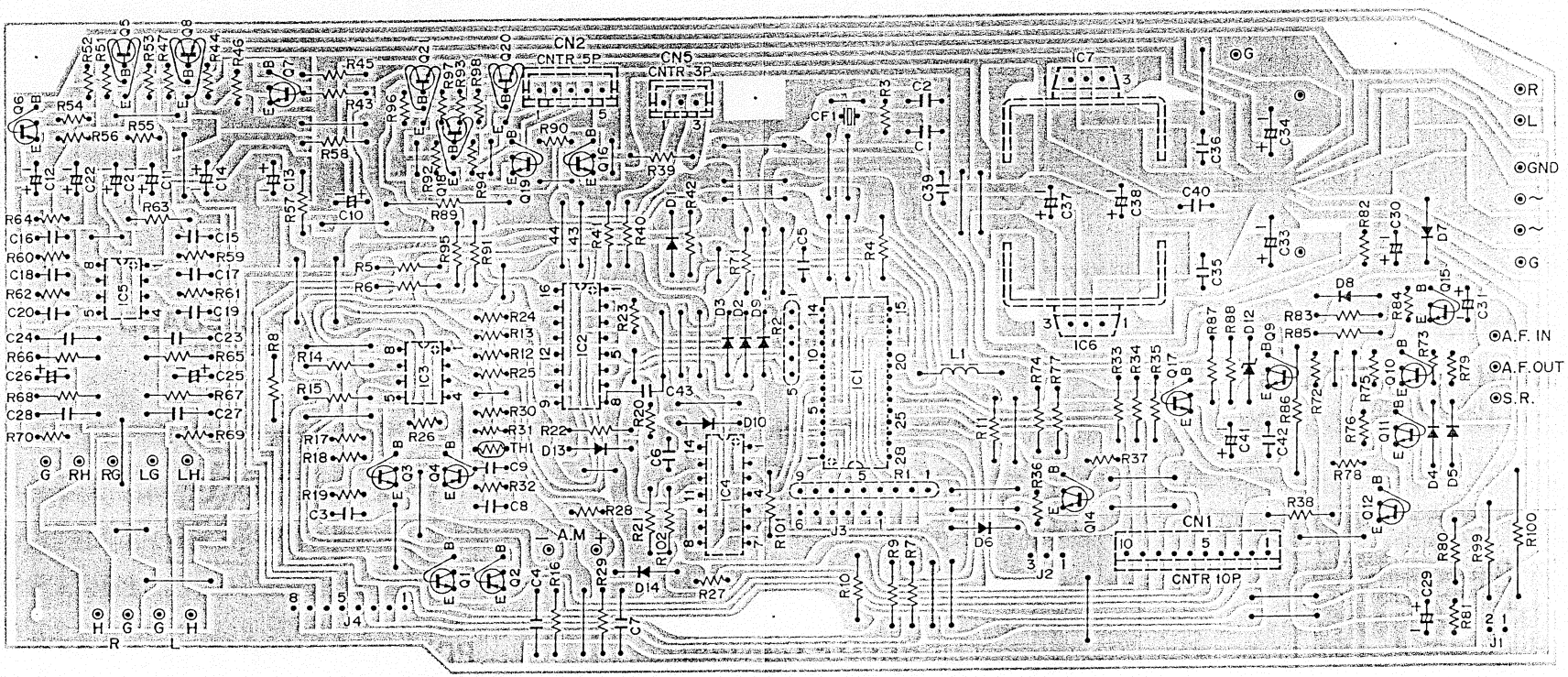
POWER INDICATOR P.C.BOARD

(BOTTOM VIEW)



CONTROL P.C.BOARD

(BOTTOM VIEW)



IC PIN NUMBERS DC VOLTAGES

SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC2	MSM4049RS	5.2V	0V	5.2V	0V	5V	0V	5V	0V	5.2V	0V	5.2V	0.5V	–	0.5V	5.1V	–				
IC3	M5218P	-0.5V	0V	0V	-12V	0V	0V	-0.6V	11.9V												
IC4	LC4011B	5.2V	0V	5.2V	5.2V	0V	0V	0V	5.2V	5.2V	0V	5.2V	4.6V	0V	5.2V						
IC5	M5218P	0V	0V	0V	-8.5V	0V	0V	0V	8.2V												
IC1	LM6416E	5.2V	5.2V	5.2V	5.2V	2.5V	2V	5.2V	5.2V	5V	5V	5.2V	5.2V	0V	0V	4.7V	4.2V	4.2V	3.2V	5.2V	5.2V
		21	22	23	24	25	26	27	28												
		0V	0V	5.2V	0V	3.8V	4.5V	5.1V	5.2V												

TRANSISTOR DC VOLTAGES

SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E
Q1	2SC2274	-0.6V	11.9V	0V	Q12	2SC536	0.7V	0V	0V
Q2	2SA984	-0.6V	-12.3V	0V	Q14	2SC536	0V	5.2V	0V
Q3	2SD863	-0.5V	11.9V	0V	Q15	2SC536	0.6V	0V	0V
Q4	2SB764	-0.5V	-12.3V	0V	Q16	2SC2274	0V	11.9V	1.1V
Q5,6	2SD1012	0.7V	0V	0V	Q17	2SC2274	5.9V	9.8V	5.2V
Q7	2SC536	0.7V	0V	0V	Q18	2SC536	0.2V	11.1V	0V
Q8	2SA608	11.2V	11.9V	11.9V	Q19	2SC536	2.2V	1.6V	1.6V
Q9	2SC536	0.6V	0.1V	0V	Q20	2SC536	0V	1.6V	1.1V
Q10	2SC536	0V	0.1V	0V	Q21	2SC536	0.7V	0V	0V
Q11	2SC536	0V	0V	0V					

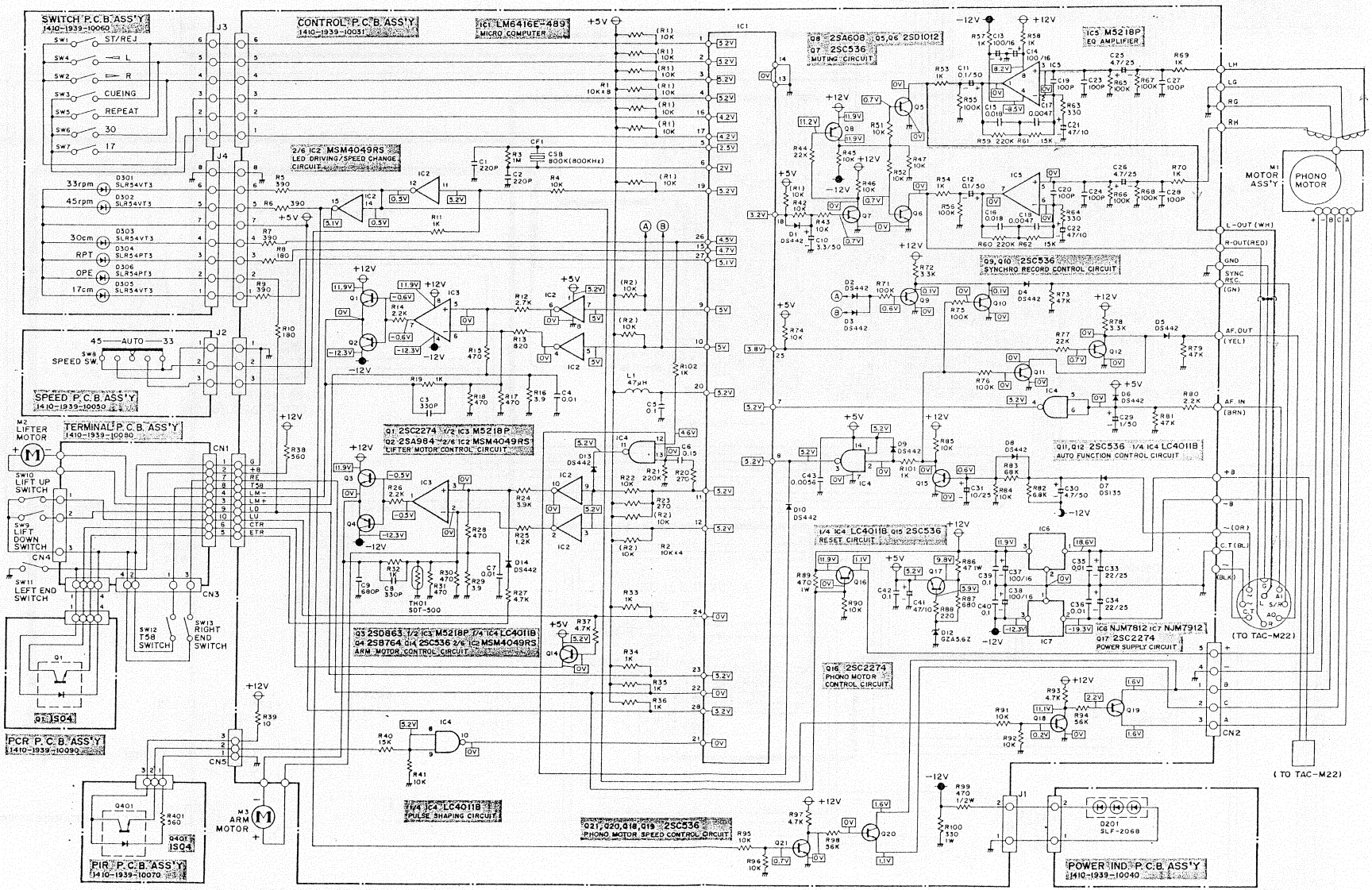
P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description				Q'ty
R31	RD4-7-1161-JH000	Carbon	470Ω	1/6W	±5%	1
R32	RD1-0-2161-JH000	Carbon	1kΩ	1/6W	±5%	1
R33	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
R34	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
R35	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
R36	RD1-0-2161-JH000	Carbon	1kΩ	1/6W	±5%	1
R37	RD4-7-2161-JH000	Carbon	4.7kΩ	1/6W	±5%	1
R38	RD5-6-1251-JM000	Carbon	560Ω	1/4W	±5%	1
R39	RD1-0-0251-JS000	Carbon	10Ω	1/4W	±5%	1
R40	RD1-5-3251-JM000	Carbon	15kΩ	1/4W	±5%	1
R41	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R42	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R43	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R44	RD2-2-3161-JH000	Carbon	22kΩ	1/6W	±5%	1
R45	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R46	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R47	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R51	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R52	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R53	RD1-0-2161-JH000	Carbon	1kΩ	1/6W	±5%	1
R54	RD1-0-2161-JH000	Carbon	1kΩ	1/6W	±5%	1
R55	RD1-0-4161-JH000	Carbon	100kΩ	1/6W	±5%	1
R56	RD1-0-4161-JH000	Carbon	100kΩ	1/6W	±5%	1
R57	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
R58	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
R59	RD2-2-4161-JH000	Carbon	220kΩ	1/6W	±5%	1
R60	RD2-2-4161-JH000	Carbon	220kΩ	1/6W	±5%	1
R61	RD1-5-3161-JH000	Carbon	15kΩ	1/6W	±5%	1
R62	RD1-5-3161-JH000	Carbon	15kΩ	1/6W	±5%	1
R63	RD3-3-1251-JM000	Carbon	330Ω	1/4W	±5%	1
R64	RD3-3-1161-JH000	Carbon	330Ω	1/6W	±5%	1
R65	RD1-0-4251-JM000	Carbon	100kΩ	1/4W	±5%	1
R66	RD1-0-4251-JM000	Carbon	100kΩ	1/4W	±5%	1
R67	RD1-0-4251-JM000	Carbon	100kΩ	1/4W	±5%	1
R68	RD1-0-4251-JM000	Carbon	100kΩ	1/4W	±5%	1
R69	RD1-0-2161-JH000	Carbon	1kΩ	1/6W	±5%	1
R70	RD1-0-2161-JH000	Carbon	1kΩ	1/6W	±5%	1
R71	RD1-0-4251-JM000	Carbon	100kΩ	1/4W	±5%	1
R72	RD3-3-2161-JH000	Carbon	3.3kΩ	1/6W	±5%	1
R73	RD4-7-3161-JH000	Carbon	47kΩ	1/6W	±5%	1
R74	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R75	RD1-0-4161-JH000	Carbon	100kΩ	1/6W	±5%	1
R76	RD1-0-4161-JH000	Carbon	100kΩ	1/6W	±5%	1
R77	RD2-2-3251-JM000	Carbon	22kΩ	1/4W	±5%	1
R78	RD3-3-2161-JH000	Carbon	3.3kΩ	1/6W	±5%	1
R79	RD4-7-3161-JH000	Carbon	47kΩ	1/6W	±5%	1
R80	RD2-2-2251-JM000	Carbon	2.2kΩ	1/4W	±5%	1
R81	RD4-7-3161-JH000	Carbon	47kΩ	1/6W	±5%	1
R82	RD6-8-2161-JH000	Carbon	6.8kΩ	1/6W	±5%	1
R83	RD6-8-3251-JM000	Carbon	68kΩ	1/4W	±5%	1
R84	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R85	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R86	RH4-7-0102-JZ000	Metal	47Ω	1W	±5%	1
R87	RD6-8-1251-JM000	Carbon	680Ω	1/4W	±5%	1
R88	RD2-2-1251-JM000	Carbon	220Ω	1/4W	±5%	1
R89	RH4-7-1102-JZ000	Metal	470Ω	1W	±5%	1
R90	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R91	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R92	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R93	RD4-7-2161-JH000	Carbon	4.7kΩ	1/6W	±5%	1
R94	RD5-6-3161-JH000	Carbon	56kΩ	1/6W	±5%	1
R95	RD1-0-3251-JM000	Carbon	10kΩ	1/4W	±5%	1
R96	RD1-0-3161-JH000	Carbon	10kΩ	1/6W	±5%	1
R97	RD4-7-2161-JH000	Carbon	4.7kΩ	1/6W	±5%	1
R98	RD5-6-3161-JH000	Carbon	56kΩ	1/6W	±5%	1
R99	RH4-7-1501-JZ000	Metal	470Ω	1/2W	±5%	1
R100	RH3-3-1102-JZ000	Metal	330Ω	1W	±5%	1
R101	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
R102	RD1-0-2251-JM000	Carbon	1kΩ	1/4W	±5%	1
	POWER INDICATOR P.C.B. ASSY					
PCB2	141-0-1939-10040	Power Indicator P.C.B. Assy				1
D201	4-2029-73010	LED, SLF 206 B				1
	SPEED P.C.B. ASSY					
PCB3	141-0-1939-10050	Speed P.C.B. Assy				1
	141-2-3529-43500	Spacer				1
SW8	4-2319-76670	Slide Switch (Speed)				1
	SWITCH P.C.B. ASSY					
PCB4	141-0-1939-10060	Switch P.C.B. Assy				1
	141-2-3519-72900	Spacer				1
SW1	4-2312-05802	Keyboard Switch				1
SW2	4-2312-05802	Keyboard Switch				1
SW3	4-2312-05802	Keyboard Switch				1
SW4	4-2312-05802	Keyboard Switch				1
SW5	4-2312-05802	Keyboard Switch				1
SW6	4-2312-05802	Keyboard Switch				1
SW7	4-2312-05802	Keyboard Switch				1
D301	DYY---SLR--54VT-	LED, SLR 54 VT 3				1
D302	DYY---SLR--54VT-	LED, SLR 54 VT 3				1
D303	DYY---SLR--54VT-	LED, SLR 54 VT 3				1
D304	DYY---SLR--54PT-	LED, SLR 54 PT 3				1
D305	DYY---SLR--54VT-	LED, SLR 54 VT 3				1
D306	DYY---SLR--54PT-	LED, SLR 54 PT 3				1
	PIR P.C.B. ASSY					
PCB5	141-0-1939-10070	PIR P.C.B. Assy				1
CN5	4-2359-78183	Connector 3P Assy				1
Q401	4-2039-71430	Photo Interrupter				1
R401	RD5-6-1251-JN000	Carbon	560Ω	1/4W	±5%	1
	TERMINAL P.C.B. ASSY					
PCB6	141-0-1939-10080	Terminal P.C.B. Assy				1
CN1	4-2359-78350	Connector 10P Assy				1
CN3	4-2369-73140	Connector 4P				1
CN4	4-2369-73130	Connector 3P				1
	111-2-6220-11100	Wire Wrap Terminal				4
	PCR P.C.B. ASSY					
PCB7	141-0-1939-10090	PCR P.C.B. Assy				1
Q1	4-2039-71430	Photo Interrupter				1

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

SCHEMATIC DIAGRAM



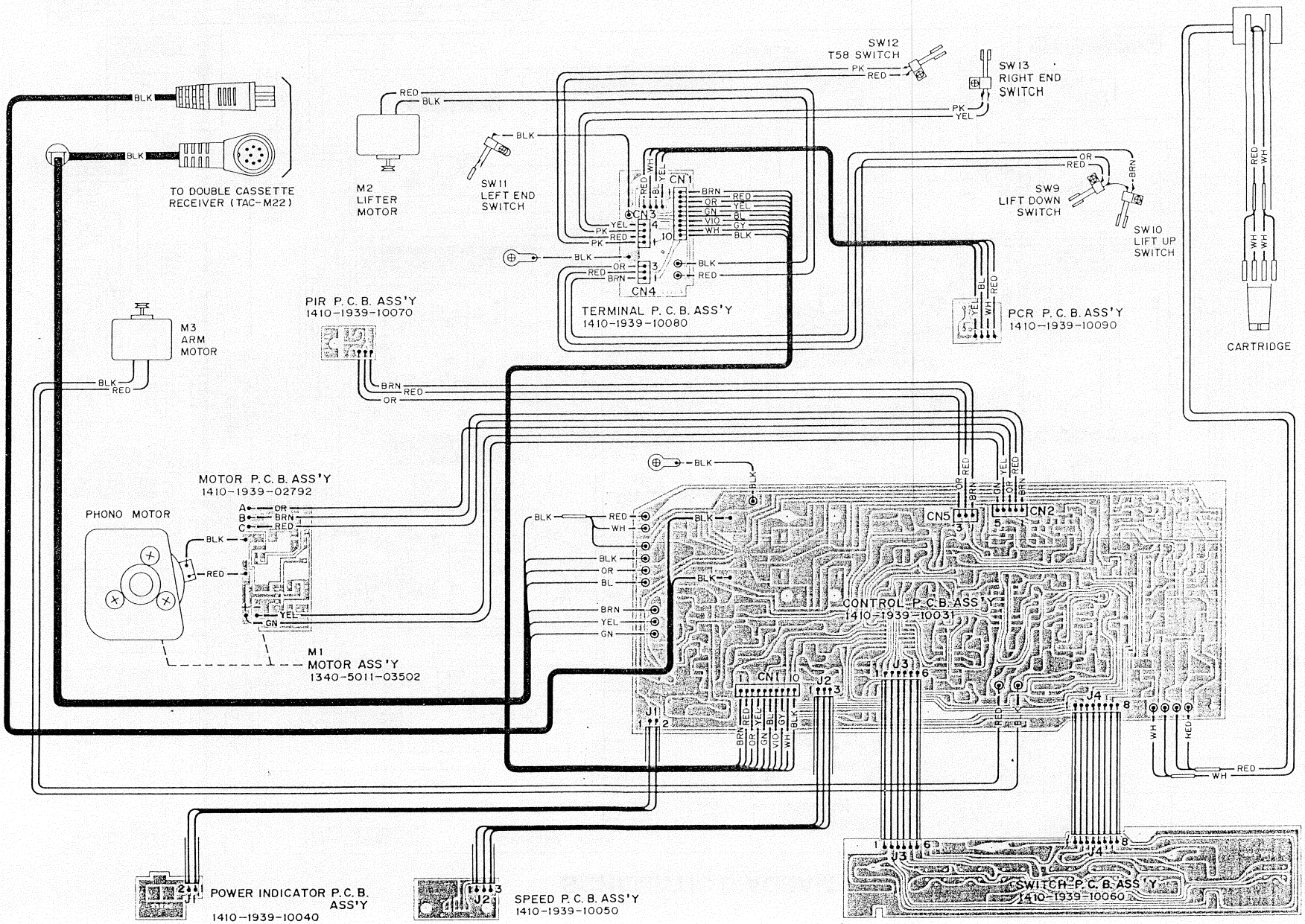
No.	Name	Position	No.	Name	Position
SW1	START / REJECT Switch	OFF	SW8	SPEED SELECT Switch	AUTO
SW2	REVERSE Switch (►)	OFF	SW9	LIFT DOWN Switch	OFF
SW3	CUEING Switch	OFF	SW10	LIFT UP Switch	ON
SW4	FORWARD Switch (◄)	OFF	SW11	LEFT END Switch	OFF
SW5	REPEAT Switch	OFF	SW12	T58 Switch	OFF
SW6	DISC SIZE Switch (30)	OFF	SW13	RIGHT END Switch	OFF
SW7	DISC SIZE Switch (17)	OFF			

NOTES:

1. All resistors values are indicated in "ohm" (K=10^3, M=10^6).
2. All capacitors values are indicated in "μF" (P=10^{-12}).
3. All voltages indicated on the schematics are measured under the following conditions.
   a. Use a V.T.V.M.
   b. All voltages ±10 % with respect to chassis ground.
   c. No signals at input terminals.
4. This is a basic schematic diagram.

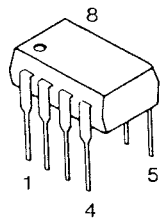
Because Fisher products are subject to continuous improvement, Fisher Corporation reserves the right to make any changes or modifications without notice.

POINT TO POINT WIRING DIAGRAM

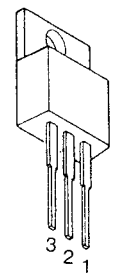


SEMICONDUCTOR LEAD IDENTIFICATION

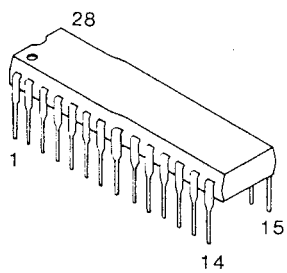
INTEGRATED CIRCUITS



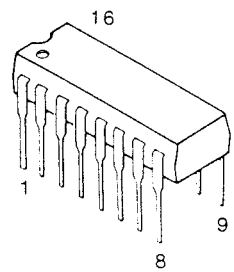
• M 5128 P



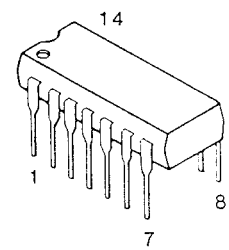
• NJM 7812
• NJM 7912



• LM 6416 E-489

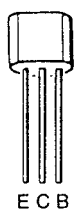


• MSM 4049 RS

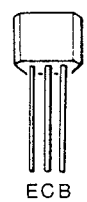


• LC 4011 B

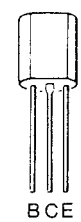
BI-POLAR TRANSISTORS



• 2SA 608
• 2SA 984
• 2SC 2274
• 2SC 536

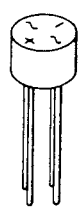


• 2SD 1012

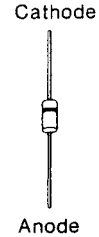


• 2SB 764
• 2SD 863

DIODES



• W 02



• DS 442
• GZA 5.6 Z